Docket No.: NCI-043CN2

Inventor: Robert Kisilevsky, et al.

Title: METHODS AND COMPOSITIONS TO TREAT
GLYCOSAMINOGLYCAN-ASSOCIATED MOLECULAR

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 $AcNHCH_2CH_2CH_2SO_3Na$

BZNHCH2CH2CH2SO3Na

FIG. I

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$$CH_3$$
 CH_3
 N
 SO_3Na

$$N \longrightarrow NHCH_2CH_2CH_2SO_3Na$$

$$CH_{3}(CH_{2})_{15}N^{+}(CH_{3})_{2}[(CH_{2})_{3}SO_{3}^{-}]$$

$$N$$
 SO_3H

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$$N \sim SO_3H$$

$$SO_3K$$

$$H_2C$$
 CH_3
 CH_3
 CH_3

$$\mathrm{CH_3CH_2CH_2PO_3H_2}$$

$$H_3C$$
 H_3C
 H_3C
 H
 H_3C

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$$H_3C$$
 SO_3Na
 $N=N$
 N
 SO_3Na
 SO_3Na

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 $\mathrm{CH_3}(\mathrm{CH_2})_4\mathrm{NHCH_2CH_2CH_2SO_3H}$

 $\mathsf{CH_3(CH_2)_5NHCH_2CH_2CH_2SO_3H}$

FIG 6

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 $\mathsf{CH_3}(\mathsf{CH_2})_6\mathsf{NHCH_2}\mathsf{CH_2}\mathsf{CH_2}\mathsf{SO_3}\mathsf{H}$

CH₃(CH₂)₇NHCH₂CH₂CH₂SO₃H

 $\mathsf{CH_3(CH_2)_8\,NHCH_2CH_2CH_2SO_3H}$

 $\mathrm{CH_3(CH_2)_9NHCH_2CH_2CH_2SO_3H}$

 $\mathrm{CH_3(CH_2)_{10}NHCH_2CH_2CH_2SO_3H}$

 $\mathrm{CH_3(CH_2)_{II}NHCH_2CH_2CH_2SO_3H}$

 $\mathrm{CH_3}(\mathrm{CH_2})_{12}\mathrm{NHCH_2}\mathrm{CH_2}\mathrm{CH_2}\mathrm{SO_3}\mathrm{H}$

FIG. 7

 $\mathrm{CH_3(CH_2)_{13}NHCH_2CH_2CH_2SO_3H}$

 $\mathrm{CH_3(CH_2)_{15}NHCH_2CH_2CH_2SO_3H}$

 $\mathrm{CH_3}(\mathrm{CH_2})_{17}\,\mathrm{NHCH_2}\,\mathrm{CH_2CH_2SO_3H}$

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Na⁺⁻O₃S

NaO₃SO NaO₃SÖ ÒМе ÒMé

XVII

CHOSO₃ Na HO CH₂OSO₃ Na NaO₃SO NaO₃SO XV XVI

Na O₃SCH₂ NaO₃SO OSO₃Na OSO₃Na NaO₃SO ÒМс ÒSO₃Na NaO₃SÖ ΗÒ XIX XXXVIII

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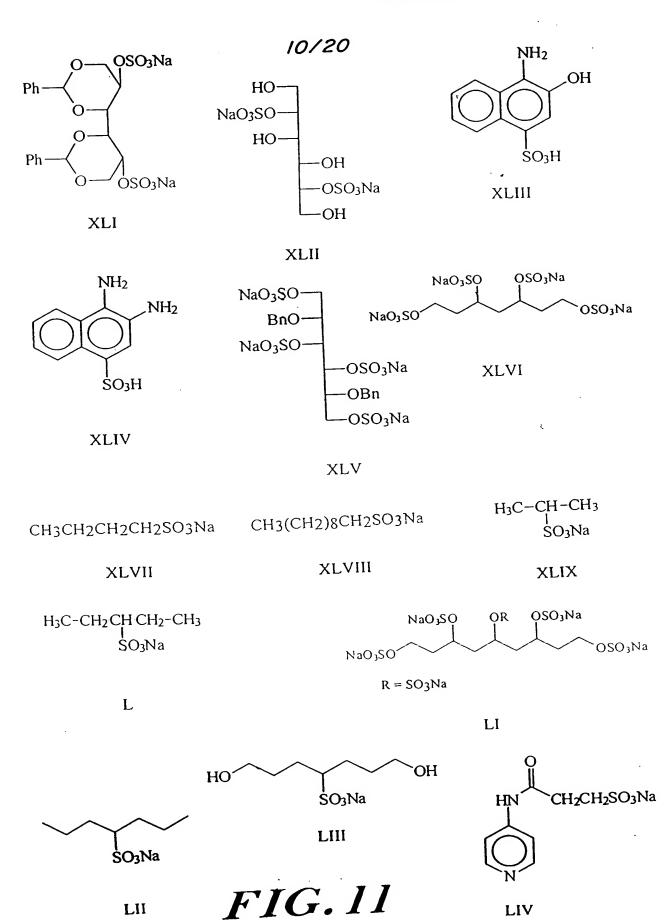
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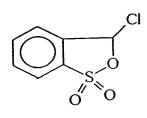
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LV

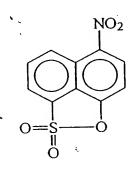
LVI

LVII

LVIII



LIX



LX

$$N$$
 SO_3Na

LXI

LXII

FIG. 12

LXIII

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FIG. 13 LXXII

LXXIV

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LXXV

$$\begin{array}{c|c} N_{a}O_{3}S & & I \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \hline \\ N_{a}O_{3}S & & \\ \\$$

LXXVI

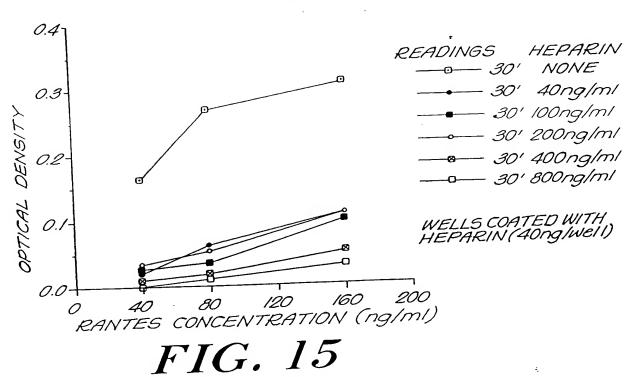
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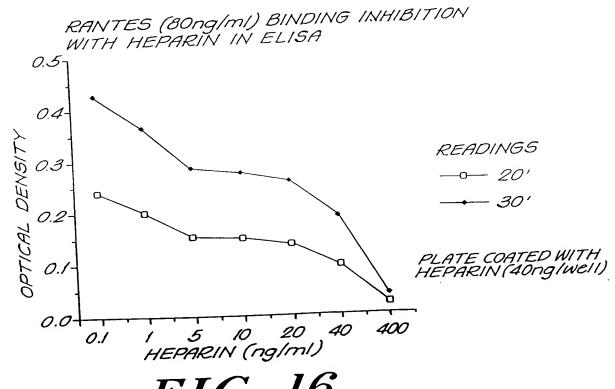


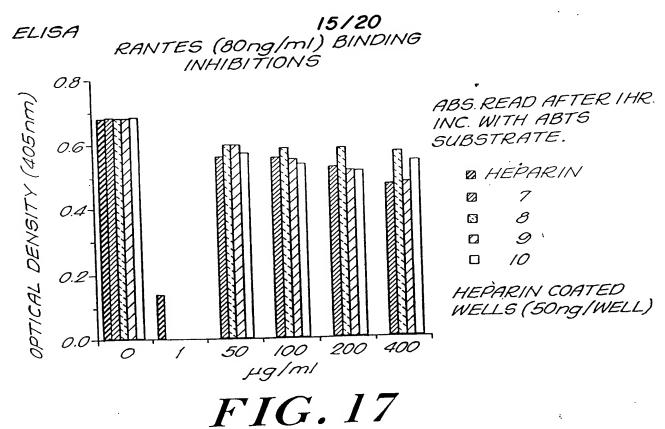
FIG. 16

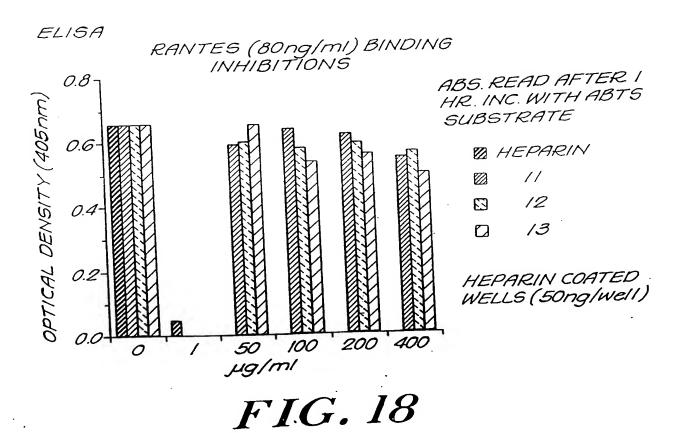
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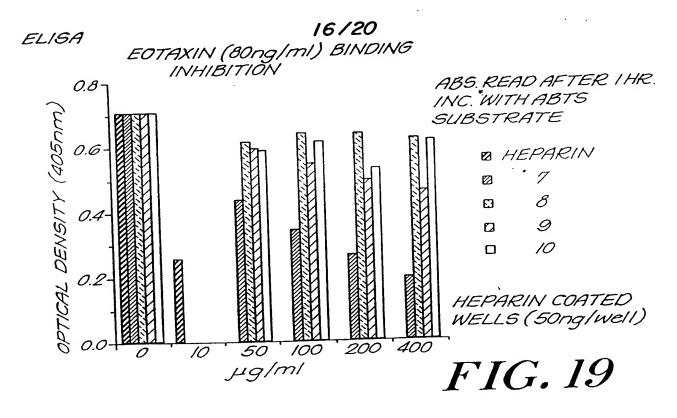


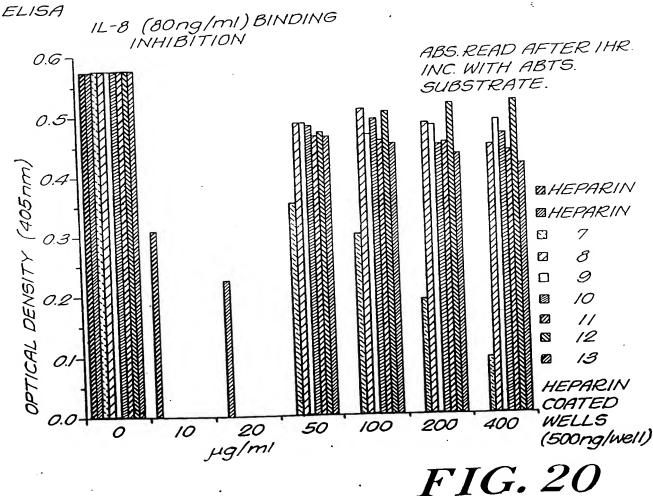


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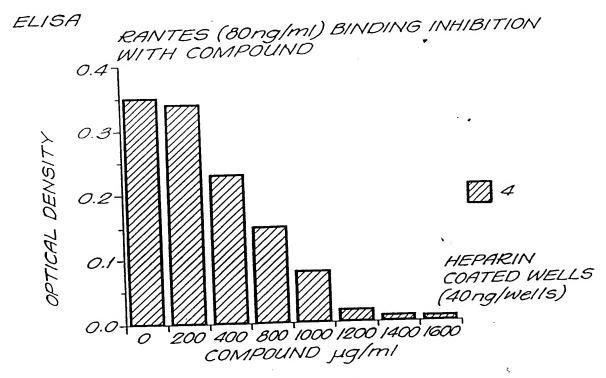
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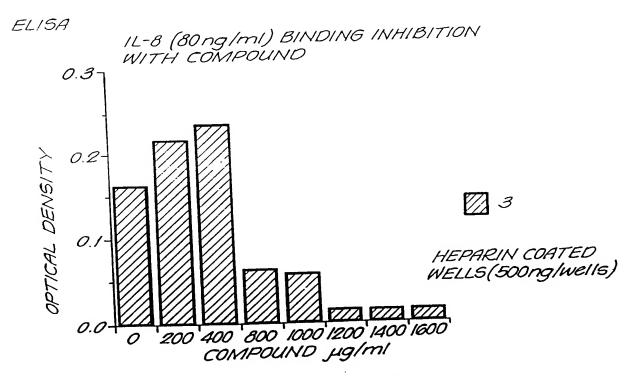


FIG. 22

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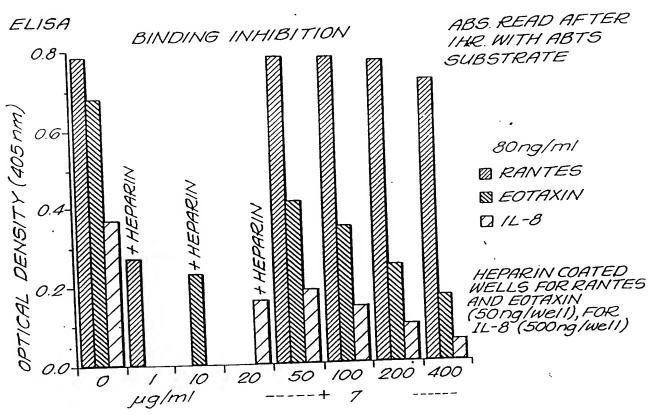
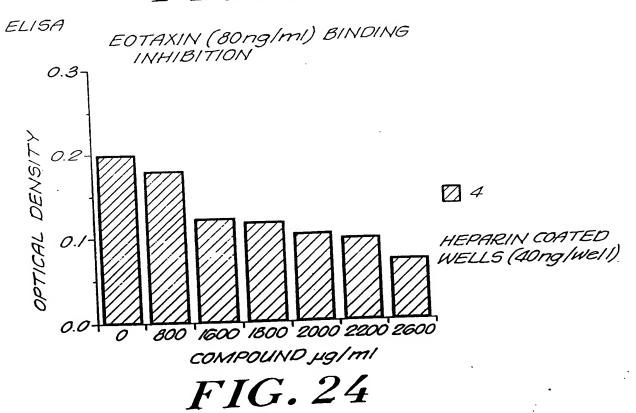


FIG. 23



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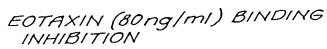
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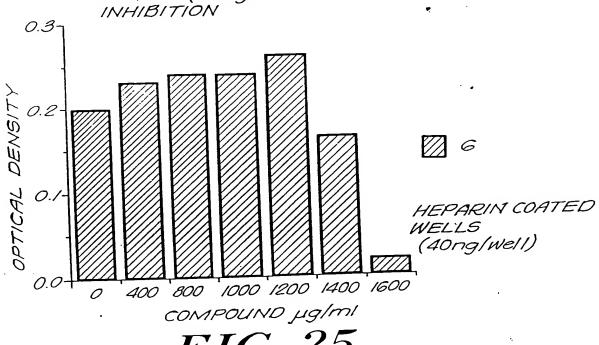


FIG. 25

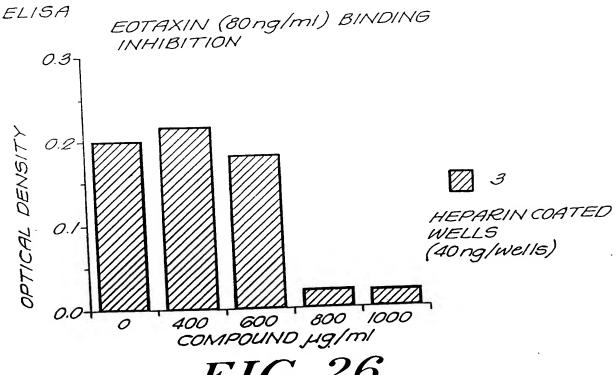


FIG. 26

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ELISA
RANTES (80ng/ml) BINDING INHIBITION
WITH COMPOUNDS

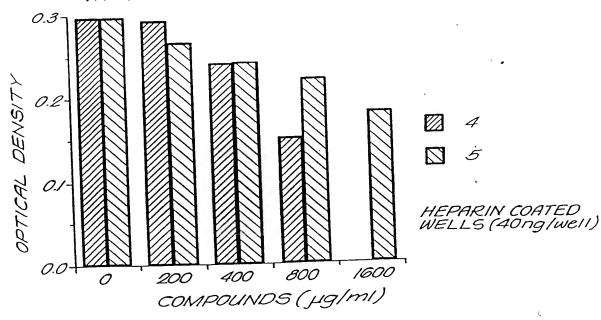


FIG. 27

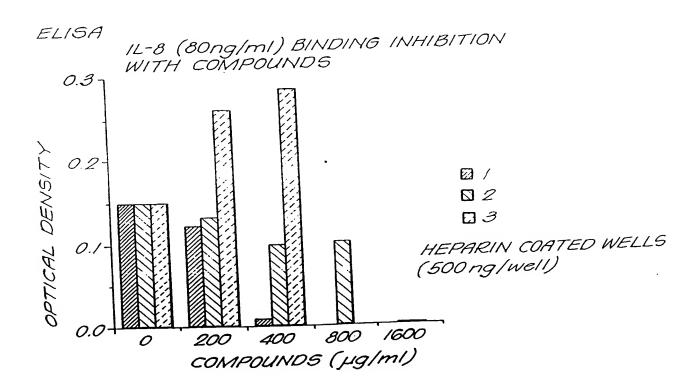


FIG. 28